

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

The real Application of:

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(f)

For: METAL OXIDE-ORGANOPOLYSILOXANE HYBRID POWDER AND A METHOD FOR THE PREPARATION THEREOF AND A COSMETIC COMPOSITION THEREWITH

## Appendix A

Please amend the claims according to the July 30, 2003, revision to 37 C.F.R. § 1.121 concerning a manner for making claim amendments.

1. (Currently Amended) A powder, comprising metal oxide organopolysiloxane homogenous hybrid particles wherein a silicon atom of the compound which forms residue group represented by general formula (1),

wherein, R is an alkyl group selected from the group consisting of a methyl group, an ethyl group and a propyl group,

a phenyl group and can be same or can be different, Y is a group represented by -R or  $-R^1-Si(-O-)_3$ , wherein  $R^1$  is an alkylene group of carbon number 1-5, and can be same or can be different and at least one is  $-R^1-Si(-O-)_3$ , n=1-100 and m=0-5 is bonded by covalent bond with a metal atom through an oxygen atom.

- 2. (Currently Amended) The powder comprised of metal oxide organopolysiloxane <u>homogenous</u> hybrid particles of claim 1, wherein metal oxide is titanium oxide and/or zirconium oxide.
- 3. (Currently Amended) The powder comprised of metal oxide organopolysiloxane <u>homogenous</u> hybrid particles of claim 1, wherein metal oxide is titanium oxide and whose specific surface area is larger than  $50 \text{ m}^2/\text{g}$ .

## 4. (Canceled)

- 5. (Currently Amended) The powder comprised of metal oxide organopolysiloxane homogenous hybrid particles of claim 2 or claim 3, wherein R of general formula (1) is a methyl group.
- 6. (Currently Amended) A method for producing a powder comprising metal oxide organopolysiloxane homogenous hybrid

particles which comprises; generating sol by hydrolysis of metal alkoxide, adding the organopolysiloxane derivatives represented by general formula (2),

wherein, R is an alkyl group, selected from the group consisting of a methyl group, an ethyl group and a propyl group, a phenyl group and can be same or can be different, X is a group represented by -R, -H or  $-R^1-Si(OR^2)_3$ , wherein  $R^1$  is an alkylene group of carbon number 1-5 and  $R^2$  is hydrogen or an alkyl group of carbon number 1-5 and can be same or can be different and at least one is -H or  $-R^1-Si(OR^2)_3$ , n=1-100 and m=0-5 to said sol to generate hybrid sol solution, then dropping the obtained hybrid sol solution into mixed solution of alkaline aqueous solution and organic solvent.

7. (Currently Amended) The method for producing a powder comprised of metal oxide organopolysiloxane <a href="https://docume.com/homogenous">homogenous</a> hybrid particles of claim 6, wherein metal is titanium and/or zirconium.

## 8. (Canceled)

9. (Currently Amended) A method for producing a porous powder comprising metal oxide organopolysiloxane homogenous hybrid particles which comprises; generating sol by hydrolysis of titanium alkoxide, adding organopolysiloxane derivatives possessing end alkoxy groups represented by general formula (3) so as the molar ratio of alkoxide of titanium and said organopolysiloxane derivatives to be 3:1-50:1, to said sol to generate hybrid sol solution,

$$(R^{2}O)_{s}Si-R^{1}-Si-CH_{s} - (CH_{s})_{n} -$$

wherein  $R^1$  is an alkylene group of carbon number 2-4,  $R^2$  is  $CH_3$  or  $C_2H_5$  and n=6-16,

then dropping the obtained hybrid sol solution into mixed solution of alkaline aqueous solution and organic solvent.

10. (Currently amended) A titanium oxide·silica composite prepared by heat treatment of porous titanium oxide·organopolysiloxane homogenous hybrid particles, wherein a silicon atom of the organopolysiloxane is bonded by covalent bond with a titanium atom through an oxygen atom and hybridized

homogeneously and whose specific surface area is larger than 50  $\,\mathrm{m}^2/\mathrm{g}$ .

- 11. (Currently amended) A producing method of the titanium oxide·silica composite by the heat treatment at the temperature of 300-700° C of porous titanium oxide·organopolysiloxane homogenous hybrid particles, wherein a silicon atom of the organopolysiloxane is bonded by covalent bond with a titanium atom through an oxygen atom and hybridized homogeneously and whose specific surface area is larger than 50 m²/g.
  - 12. (Canceled)
  - 13. (Canceled)
- 14. (Currently Amended) A cosmetic composition comprising the powder comprised of metal oxide organopolysiloxane homogenous hybrid particles of any one of claims 1 to 3.
  - 15. (Canceled)
- 16. (Currently Amended) A cosmetic composition comprising the powder comprised of metal oxide organopolysiloxane

homogenous hybrid particles of claim 5.

17. (Previously Presented) A cosmetic composition comprising the metal oxide silica composite of claim 10.